

BCS

KOZAK, M.

Pottery

243. Craftsmanship in the ceramic industry.—M. KOZAK (*Slavica*, 28, 49, 1950). The history of ceramic craftsmanship in Czechoslovakia is traced and present-day producers in that country are dealt with extensively. The place of ceramic craftsmen in the 5-year plan is considered.

KOZAK, M.

Model tests on the siphon spillway of the Rakaca Valley reservoir. p. 17.

HIDROLOGIAI KOZLONY. HYDROLOGICAL JOURNAL. (Magyar Hidrologiai Tarsasag)
Budapest, Hungary. Vol. 39, no. 1, Jan. 1959.

Monthly list of East European Accessions (EEAI), LC, Vol. 8, no. 7, July 1959
uncla.

LANG, I.; KOZAK, M.

Potassium uptake of winter rye seedlings as affected by various clay minerals. Agrokem talajtan 13 Suppl.:109-116 My '64.

1. Research Institute of Soil Science and Agricultural Chemistry of the Hungarian Academy of Sciences, Budapest.

KOZAK, Matyas

Application of Rb⁸⁶ isotope for testing potassium distribution
in soils. Agrochem talajtan 12 no.4:565-572 D '63.

1. Research Institute of Soil Science and Agrochemistry,
Hungarian Academy of Sciences, Budapest.

KOZAK, Miklos

HUNGARY

PhD, Candidate for Technological Sciences

Construction Industry and Transportation
University of Technology, No.2 Department of
Hydraulic Engineering (Építőipari és Közlekedési
Műszaki Egyetem II.sz.Vízépítészeti Tanszék)

Budapest, Hidrologiai Közlemény, No 5, Oct 62, pp 411-415.

"Methods of Measuring the Concentration of Slurry."

KOZAK, Miklos, dr., a muszaki tudomanyok kandidatusa

Approximate computation of the hydraulic resistance of the inhomogeneous soil transporting slurry line. Hidrolgiai kozlony 41 no.2:94-102 Ap '61.

1. Epitoipari es Kozlekedesi Muszaki Egyetem II. Vizepitestani Tanszeke; "Hidrologiai Kozlony" szerkeszto bizottsagi tagja.

KOZAK, Miklos, dr., a muszaki tudomanyok kandidatusa

Measuring methods for slurry concentration. Hidrologiai kozlony
42 no.5:411-415 0 '62.

1. Epitoipari es Kozlekedesi Muszaki Egyetem 2. sz. Vizepites-
tani Tanszek; "Hidrologiai Kozlony" szerkeszto bizottsagi tagja.

KOZAK, Miklos, dr., okleveles mernok, a muszaki tudomanyok kandidatusa

Measuring methods for pulp concentration and yield. Bany
lap 96 no.5:299-306 My '63.

1. Tatabanyai Szenbanyaszati Troszt, Tatabanya.

LUKACS, Laszlo; KOZAK, Miklos, dr.

Mud concentration measurement. Hidrelogiai közlony 43 no.2:183-184
Ap '63.

1."Hidrelogiai Közlony" szerkeszto bizottsagi tagja (for Kozak).

KOZAK, Miklos, aspirans

Description of methods for the calculation of the nonpermanent
open surface flow. Hidrologiai kozlony 36 no.1:17-32 F'56

KOZAK, Miklos, dr., a muszaki tudomanyok kandidatusa; SVAB, Janos

Laboratory tests of weirs with a broken axis in the ground
plan. Hidrologiai kozlony 41 no.5:376-377 0'61

1. "Hidrologiai Kozlony" szerkeszto bizottsagi tagja (for
Kozak).

KOZAK, Miklos, dr., okleveles mernok, a muszaki tudomanyok kandidatusa
VEKINGER, Lajos, okleveles gepeszmernok

Determination of the characteristics of coal transportation
under hydraulic pressure. Bany lap 97 no.1:33-41 Ja'64

1. Budapesti Muszaki Egyetem (for Kozak). 2. Tatabanyi Szen-
banyaszati Troszt, Tatabanya (for Vekinger).

53610

26271

Z/009/61/000/008/002/005

E112/E153

AUTHORS: Scholle, Stanislav, and Kozák, Miroslav

TITLE: Preparation and stabilization of urea peroxide hydrate

PERIODICAL: Chemický průmysl, 1961, No.8, p. 417

TEXT: This paper describes the preparation and stabilization of the above compound on a laboratory scale. Finely-powdered urea was added to an ice-cold solution of H_2O_2 and the solid reaction product was isolated after two hours by suction. It was washed with cold water and alcohol and finally dried at $30-35^{\circ}C$. Using a 35% solution of H_2O_2 at $0^{\circ}C$, the urea peroxide was obtained with a yield of 63%. The use of more dilute solutions of H_2O_2 and higher reaction temperatures caused a sharp drop in yields. Stabilization experiments were carried out by adding the stabilizing agents (0.1 to 3%, as recommended in the patent literature) to the still damp product and mixing it in with a glass rod. Only then was the stabilized product dried. Stability was determined at $45^{\circ}C$ by:

- a) exposure to air, b) storage in a stoppered bottle, and
- c) storage in a bottle with an inserted little water-container.

X

Card 1/2

26271

Preparation and stabilization of...

Z/009/61/000/008/002/005
E112/E153

Best stabilizing effects were obtained with sodium sulfate; the results were less favourable for boric acid or primary sodium phosphate. Contrary to literature data, citric acid was found ineffective. Decomposition of the urea peroxide is accelerated by moisture and by products which catalyze the decomposition of H_2O_2 and which may be present in the raw materials. Urea peroxide prepared from chemically pure raw materials showed an improved stability.

There are 6 references: 3 German, 1 English, 1 Soviet and 1 Czech. The English language reference reads as follows:

Ref.2: Kirk-Othmer: Encyclopedia of Chemical Technology, X. :dil, pp. 82-84, New York, 1953.

ASSOCIATION: Vysoká škola chemickotechnologická, Pardubice
(School of Chemical Technology, Pardubice)

SUBMITTED: April 10, 1959

Card 2/2

KOZAK, Miroslav; KRAJCI, Pavol

Use of ion exchangers for determination of nitrate nitrogen.
Chem prum 13 no.5:246-248 My '63.

1. Severoceske chemicke zavody, Lovosice, Dusikaren Sala.

KOZAK, M. I.

USSR/Physics - Heat Conduction of Powders Jan 52

"Heat Conduction of Certain Powders at High Temperatures," M. I. Kozak, Chair of Phys, L'vov State Med Inst

"Zhur Tekh Fiz" Vol XXII, No 1, pp 73-76

Gives results of investigation on the heat conduction of quartz (silica gel) and graphite powders in the temp range 100 to 600°C. The heat conduction of quartz was investigated for various sizes of the granules. Acknowledges the guidance of S. Lorii who also proposed the theme. Submitted 23 Aug 50.

206T102

119 1112 11

KOZAK, M. I.

"Thermal Conductivity in Non-Metallic Powers at High Temperatures." Min Higher Education USSR, L'vov State U imeni Ivan Franko, L'vov, 1955. (Dissertation for the Degree of Candidate in Physical and Mathematical Sciences)

SO: M - 955, 16 Feb 56

KOZAK, M.: TOMAIDES, J.: REZAC, J.:

Mains frequency induction heating. p. 164.

STROJIRENSKA, VYROBA, Praha, Czechoslovakia, Vol. 7, no. 3, 1959

Monthly list of East European Accessions (EEAI), LC, Vol. 8. no. 7,
July 1959

uncla.

KOZAK, M.

High-frequency induction heating in mechanical engineering. p.3.

CZECHOSLOVAK HEAVY INDUSTRY. (Illustrated magazine issued by the Chamber of Commerce of Czechoslovakia. English-language edition; issued also in German as Schwerindustrie der Tschechoslowakei and in French, Russian, and Spanish. Monthly).

Prague, Czechoslovakia, Vol.-- No. 11, 1959.

Monthly List of East European Accessions, (EEAI), LC, Vol. 8, No. 12, Dec. 1959.
Uncl.

Kozak, M.

District heating of Flastyuk Street. p. 449

ENERGIA ES ATOMTECHNIKA. (Energiagazdalkodasi Tudomanyos Egyesulet)
Budapest, Hungary. Vol. 12, no. 7/8, July/August 1959

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no.11
November 1959
Uncl.

24(3)

AUTHORS:

Zhuravlev, V. A., Kozak, M.

SOV/56-36-1-61/62

TITLE:

The Conductivity of Semiconductors in an Ultrasonic Field
(Provodimost' poluprovodnikov v ul'trazvukovom pole)

PERIODICAL:

Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1959,
Vol' 36, Nr 1, pp 343-344 (USSR)

ABSTRACT:

The authors investigated the influence exercised by ultrasonics on the conductivity of some semiconductors. Samples of selenium, cadmium sulfide, galenite, cuprous oxide, tin oxide, and germanium were irradiated with ultrasonics (frequency 600,000 cycles and efficiency up to 10 W/cm²). In all cases conductivity varied under the influence of ultrasonics. However, an analysis of this phenomenon shows that ultrasonics exercises no specific effect upon conductivity, for the observed variation of conductivity is due to heating of the samples. When ultrasonic irradiation was switched on, conductivity did not change immediately but either increased or decreased according to the sign of the thermal coefficient of the sample under investigation. This variation depended on heating of the sample during irradiation, in which case the law $\sigma = \sigma_0 \exp \{-E/kT\}$ holds. When subjected to ultrasonic

Card 1/3

The Conductivity of Semiconductors in an Ultrasonic
Field

SOV/56-36-1-61/62

irradiation the sample cools down. The here discussed deliberations are illustrated by a diagram. Irradiation of cuprous oxide, tin oxide, cadmium sulfide, and germanium gave similar results. For selenium slightly different results were obtained. The authors investigated two groups of selenium samples: such with positive and such with negative temperature coefficients. The conductivity of the samples with positive and negative temperature coefficients increased or decreased respectively under irradiation. However, in the case of heating of selenium by ultrasonics and cooling down after switching off of ultrasonic irradiation, a certain "hysteresis of conductivity" occurs. This hysteresis is due to the instability of conductivity and may be ascribed to thermal influence. In connection with what has been shown, ultrasonics probably exercises no specific influence on luminescence. There are 2 figures and 6 references, 3 of which are Soviet.

Card 2/3

The Conductivity of Semiconductors in an Ultrasonic Field SOV/56-36-1-61/62

ASSOCIATION: L'vovskiy gosudarstvennyy meditsinskiy institut (L'vov State Medical Institute)

SUBMITTED: August 30, 1958

Card 3/3

17.4311

24.5200

84272

S/170/60/003/010/018/023
B019/B054

AUTHOR:

Kozak, M. I.

TITLE:

The Heat Conduction Coefficients of Nonmetallic Powders
at High Temperatures

PERIODICAL:

Inzhenerno-fizicheskiy zhurnal, 1960, Vol. 3, No. 10,
pp. 110-112

TEXT: The author gives results of investigations of the temperature dependence of the heat conduction coefficients of clay, ground sand, aluminum oxide, asbestos, graphite, copper oxide, and powder mixtures. The method had been described in a previous paper (Ref. 1). For ordinary powdered clay with a specific gravity of 1.20 g/cm^3 , the heat conduction coefficient λ changed from $4.35 \cdot 10^{-4}$ to $6.50 \cdot 10^{-4}$ absolute units in the temperature range of from 89 to 700°C . For fireproof clay with a specific gravity of 0.88 g/cm^3 , λ was $3.94 \cdot 10^{-4}$ at 105°C , and $5.05 \cdot 10^{-4}$ absolute units at 636°C . The heat conduction coefficient of ground sand (grain size 0.2 mm, specific gravity 1.49 g/cm^3) increased

Card 1/3

84272

The Heat Conduction Coefficients of Nonmetallic S/170/60/003/010/018/023
Powders at High Temperatures B019/B054

from $10.2 \cdot 10^{-4}$ absolute units at 76°C linearly with temperature to $16.5 \cdot 10^{-4}$ absolute units at 600°C . After repeated heating and cooling of aluminum oxide, a λ of $3.8 \cdot 10^{-4}$ absolute units was measured at 100°C , which rose linearly with temperature to $5.7 \cdot 10^{-4}$ absolute units at 660°C . Investigations of asbestos wadding and asbestos powder showed that their heat conduction coefficients differ only slightly. For both types, values for λ of $3.78 \cdot 10^{-4}$ and $4.17 \cdot 10^{-4}$ absolute units at 100°C were indicated, which rose to $4.53 \cdot 10^{-4}$ and $4.47 \cdot 10^{-4}$ absolute units at 660°C . The specific gravity of Ceylon graphite was 0.82 g/cm^3 , the average grain diameter 0.34 mm . The diagram of Fig. 1 shows that this graphite has a λ of about $9 \cdot 10^{-4}$ absolute units after preliminary thermal treatment at about 75°C , which rises at 729°C to about $15.5 \cdot 10^{-4}$ absolute units. Kudino graphites with a grain size of 0.01 mm and 0.4 mm have nearly the same specific gravity of about 0.8 g/cm^3 . While, however, the fine-granular graphite has a nearly constant λ of about $13 \cdot 10^{-4}$ absolute units (a poorly marked maximum at about 150°C), the λ of the large-grained type rises from about $13 \cdot 10^{-4}$ absolute units at 100°C to about $19 \cdot 10^{-4}$

Card 2/3

The Heat Conduction Coefficients of
Nonmetallic Powders at High Temperatures

84272

S/170/60/003/010/018/023
B019/B054

absolute units at 750°C (the values for λ of graphite had to be taken from the diagram). Copper oxide (grain size 0.05 mm, specific gravity 3.28 g/cm³) shows, after preliminary thermal treatment, $21.6 \cdot 10^{-4}$ absolute units at 100°C. This value remained constant up to 300°C, and decreased to $19.4 \cdot 10^{-4}$ absolute units above this temperature (400-600°C). The investigation of powder mixtures shows that the λ is additively formed by the heat conduction coefficients of the components. There are 1 figure and 3 Soviet references. X

ASSOCIATION: Gosudarstvennyy meditsinskiy institut, g. L'vov
(State Medical Institute, L'vov)

SUBMITTED: June 11, 1960

Card 3/3

L 10583-63

EPF(c)/EPT(m)/BIS Pr-4 51/52

ACCESSION NR: AP3001489

S/0195/63/004/002/0312/0314

AUTHOR: Zhuravlev, V. A.; Kozak, M. I.; Kuzhelyuk, A. A.

TITLE: Relation of catalytic activity and the yield of semiconductor catalysts in the process of aging

SOURCE: Kinetika i kataliz, v. 4, no. 2, 1963, 312-314

TOPIC TAGS: catalytic activity, catalytic yield, aging process, Pb sub 2 O, PbO, CuO, NiO, Ni sub 2 O sub 3

ABSTRACT: The investigation of the relation between catalyst activity and the catalyst yield in the process of formation and aging of catalysts indicates that the catalysts used in the investigation can be divided into two groups. The first group includes NiO and Ni sub 2 O sub 3. Their catalytic activity and the yield change symbatically while contact-potential difference changes antibatically. The reverse is observed with Pb sub 2 O, PbO and CuO samples. The observed phenomena can be explained by the electronic theory of catalyst. The type of charge on the surface of catalyst and the indirect change in yield during the adsorption after its immersion in H sub 2 O sub 2 solution and during the drying process was examined. It was found that the adsorbed molecules on the samples

Card 1/2

L 10583-63

ACCESSION NR: AP3001489

which show symbiotic relationship between the catalytic activity and yield are the donors and the ones which show antibiotic relationship are acceptors. The obtained results agree with one of the main electronic deductions in the catalyst theory that there is a correlation between the catalytic activity and the yield. This relation can be either symbiotic or antibiotic. Orig. art. has: 1 figure and 6 graphs.

ASSOCIATION: L'vovskiy meditsinskiy institut kafedra fiziki (Lvov Medical Institute, Department of Physics)

SUBMITTED: 26Sep61

DATE ACQD: 10Jun63

ENCL: 00

SUB CODE: 00

NO REF SOV: 011

OTHER: 001

Card 2/2

RUSTANOV, E.M., KOZAK, M.M.

Testing the performance of the inserted pump having hollow sucker
rods. Trudy AzNII DN no.6:109-132 '57. (MIRA 12:12)
(Oil well pumps) (Sucker rods)

a, n L 9793-66

ACC NR: AP5028539

SOURCE CODE: UR/0286/65/000/020/0140/0140

AUTHORS: Garber, V. M.; Kerbaliyev, A. I.; Kozak, M. M.; Matskin, L. A.; Petrov, V. P.; Rudoy, Yu. M.; Sil'verstrov, V. T.

ORG: none

TITLE: Automatic machine for packaging liquid products in cans with inserted or rolled lids. Class 81, No. 175867

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 20, 1965, 140

TOPIC TAGS: automation, storage device, lubricant

ABSTRACT: This Author Certificate presents an automatic machine for packaging liquid products in cans with inserted or rolled lids (for example, oils and lubricants), consisting of mechanisms for transporting and transferring cans, metering and filling of cans, interlocking and automation of the operations. To improve production, decrease working area, and eliminate individual drives for each automated transporting or synchronizing device, the machine is constructed as a single unit (see Fig. 1) with provisions for rolling or inserting lids from a lid bin, a labeling device with label magazine, and a common automated drive.

Card 1/2

UDC: 621.798.37 621.398.4 621.798.6

L 9793-66

ACC NR: AP5028539

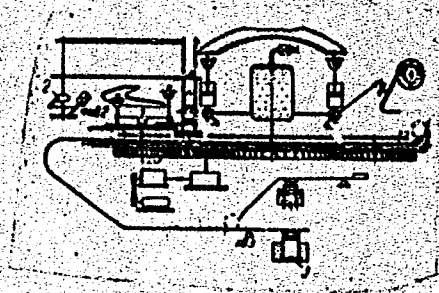


Fig. 1. 1 - Device for rolling or inserting lids; 2 - magazine; 3 - labelling device.

Orig. art. has: 1 figure.

SUB CODE: 13/ SUBM DATE: 19Mar62/

DC

Card 2/2

KOZAK, M.N., inzh.; POLOTSKAYA, G.M., inzh.; ROSLYAKOV, P.S.;
PERFILOV, I.F., inzh., red.; KASITSYNA, K.N., inzh., red.

[Nondestructive test of concrete in structural elements;
work practice of the Likhobory Combine of the Production
Enterprises of the Construction and Assembly Trust of the
Council of National Economy of the Moscow City Economic
Region and the Magnitostroy Trust] Sposoby opredeleniia
prochnosti betona v konstruktsiakh bez ikh razrusheniia;
opyt Likhoborskogo kombinata proizvodstvennykh predpri-
iati tresta "Mosgorsovmarkhozstroi" i tresta "Magnito-
stroi." Moskva, Gosstroizdat, 1962. 21 p.

(MIRA 17:10)

1. Akademiya stroitel'stva i arkhitektury SSSR. Nauchno-
issledovatel'skiy institut organizatsii, mekhanizatsii i
tekhnicheskoy pomoshchi stroitel'stvu. 2. Likhoborskiy
kombinat proizvodstvennykh predpriyatiy Stroitel'no-
montazhnogo tresta Soveta narodnogo khozyaystva Moskov-
skogo gorodskogo ekonomicheskogo rayona (for Kozak,
Polotskaya). 3. Tsentral'naya laboratoriya tresta
"Magnitostroy" (for Roslyakov).

KOZAK, M. P.

"Selection of Peas and Summer Vetch in the Central Ural Area." Cand Agr
Sci, All-Union Inst of Plant Husbandry, Leningrad, 1954. (RZhBiol, No 8, Dec 54)

Survey of Scientific and Technical Dissertations Defended at USSR
Higher Educational Institutions (12)
SO: Sum. No. 556, 24 Jun 55

USSR/Cultivated Plants - Fodders.

M-4

Abs Jour : Ref Zhur - Biol., No 20, 1958, 91711

Author : Kozak, M.P.

Inst : Krasnoufim Selection Station.

Title : On the Acceleration of Spring Vetch Seed Ripening.

Orig Pub : Zemledeliye, 1958, No 2, 73-75.

Abstract : The method of vernalization of vetch seeds at a temperature of 0-8° developed by the Krasnoufim Selection Station reduced the vegetative period by 4-16 days. The method increased the yield percentage of mature seeds. It also increased the crop productivity of the seeds. In 1956, in sowing mixtures of vetch and oats (100 and 50 kg per hectare respectively) a yield of 15.5 centners of vetch seed and 9.5 centners of oats per hectare was obtained. On well fertilized soils it is recommended to sow 140-150

Card 1/2

USSR/Cultivated Plants - Fodders.

M-4

Abs Jour : Ref Zhur - Biol., No 20, 1958, 91711

kg of vetch and 60-70 kg of oats per hectare. On poorer soils the sowing rate should be reduced to 45-50 kg per hectare. The experiments were carried in Sverdlovskaya and Permskaya Oblasts. -- M.P. Ovsyannikova.

Card 2/2

- 73 -

MAL'TSEV, M.N., starshiy inzhener; KOZAK, N.G.

Growing oleasters from local seeds. Put' i put.khoz.
4 no. 5:40 My '60. (MIRA 13:11)

1. Nachal'nik opytno-obsledovatel'skoy stantsii, g.Akmolinsk
(for Kozak).
(Oleaster) (Railroads--Snow protection and removal)

L 11157-66 EWT(m)/EWA(d)/EWP(t)/EWP(z)/EWP(h) JD
 ACC NR: AP6000356 SOURCE CODE: UR/0286/65/000/021/0049/0049

AUTHORS: Prosvirov, N. T.; Gedberg, M. G.; Aderikhin, A. S.; Salimon, V. S.;
 Ar'kov, V. G.; Mel'nikov, M. P.; Kozak, N. N.

ORG: none

TITLE: Modified high speed steel. Class 40, No. 176071 [announced by Volgograd
 Scientific Research Institute of Machine Construction Technology (Volgogradskiy
 nauchno-issledovatel'skiy institut tekhnologii mashinostroyeniya)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 21, 1965, 49

TOPIC TAGS: steel, carbon, chromium, tungsten, vanadium, titanium, nitrogen,
 manganese, carbon steel, alloy steel

ABSTRACT: This Author Certificate presents a modified high speed steel containing
 carbon, chromium, tungsten, vanadium, and nitrogen. To increase its cutting ability,
 the steel has the following composition (in %): carbon 0.85—1.0; chromium 4.0—
 5.0; tungsten 9.0—10.5; vanadium 2.2—2.4; titanium 0.25—0.30; nitrogen 0.09—0.13;
 manganese 1.2—2.0.

SUB CODE: 11/ SUBM DATE: 04Feb63

UDC: 669.14.018.252—3

Card 1/1

KOZAK, N.Ye., insh. (Kiyev)

Manufacturing asbestos cement sheets in the section's work-
shops. Put' 1 put.khoz. 4 no. 5:36 My '60. (MIRA 13:11)
(Asbestos cement)

KOZAK, N.Ye., inzh., g. Kiyev.

Strong, low-cost fences. Put' 1 put. khoz. 5 no.3:36 Mr
'61. (Fences) (MIRA 14:3)

KOZAK, N.Ye., inzh. (g.Kiyev)

Houses made from slag-alabaster blocks. Put' i put.khoz.
5 no.7:33 J1 '61. (MIRA 14:8)
(Building blocks) (Alabaster) (Slag)

L 21251-66 EWT(1)/EWT(m)/EWP(t) IJP(s) JD/AT
SOURCE CODE: UR/0185/66/011/003/0253/029

ACC NR: AP6009065

AUTHOR: Kozak, O. V.; Mykhats'ka, N. A. — Mikhatskaya, N. A.; Pasichnyk, L. L. —
Pasichnik, L. L.

ORG: Institute of Physics, AN URSSR, Kiev (Instytut fizyky AN URSSR)

TITLE: The measurement of electron temperature in helium plasma by the intensity ratio of the spectral lines

SOURCE: Ukrayins'kiy fizychnyy zhurnal, v. 11, no. 3, 1966, 253-257

TOPIC TAGS: electron temperature, helium plasma, spectral line

ABSTRACT: This paper presents some calculations linking the intensity ratio of the spectral lines with the electron temperature in helium plasma. The calculations are carried out for different singlet ($\lambda = 5047\text{\AA}$, $\lambda = 5016\text{\AA}$, $\lambda = 4922\text{\AA}$) and triplet ($\lambda = 4713\text{\AA}$, $\lambda = 4472\text{\AA}$) combinations. The excitation function for He-lines and cross-section data in maxima applied here represent an average of results obtained by other authors. The electron temperature values obtained by the intensity ratio of the helium spectral lines in the plasma of a positive discharge column with a hot cathode are compared with the results obtained by means of probe techniques. The experimental data show that intensity ratio of some spectral lines depends on the helium pressure when the latter is over 10^{-3} mm.Hg. The use of spectral lines for determining the electron temperature of plasma. Orig. art. has: 4 figures, 2 tables, and 1 formula. [Based on authors' abstract.] [JKP]

Card 1/1 SUB CODE: 20/ SUBM DATE: 04Jun65/ ORIG REF: 062/ OTH REF: 008/

PASECHNIK, L.L. [Pasichnyk, L.L.]; KOZAK, O.V.

Study of the escape of charged particles from a plasma in a magnetic field. Ukr.fiz.zhur. 7 no.11:1165-1171 N '62. (MIRA 15:12)

1. Institut fiziki AN UkrSSR, Kiyev.
(Plasma (Ionized gases)) (Magnetic fields)

ACCESSION NR: AP4035699

S/0057/64/034/005/0873/0878

AUTHOR: Pasechnik, L.L.; Kozak, O.V.; Yagola, V.V.

TITLE: Magnetic confinement of a dense current-carrying plasma

SOURCE: Zhurnal tekhnicheskoy fiziki, v.34, no.5, 1964, 873-878

TOPIC TAGS: plasma, plasma filament, dense plasma, plasma confinement, magnetic plasma confinement, plasma diffusion, ambipolar diffusion, helium plasma

ABSTRACT: Dense (10^{12} to 10^{14} cm⁻³) plasma filaments were formed in helium at pressures from 0.1 to 0.01 mm Hg. The plasma filament carried a current with current density up to 10^3 A/cm² and was located in a longitudinal magnetic field of 7 kOe or less. The gas pressure and longitudinal magnetic field strength were varied, and the radial density distribution in the plasma filament was measured. The density distributions were compared with calculations based on ambipolar diffusion theory. The diffusion theory accounted adequately for the observations in magnetic fields less than 3 kOe. The plasma filaments were formed in a tube 8 cm in diameter and 80 cm long and containing a hot tungsten cathode at one end and a cold anode at the other. At the beginning of the operating cycle, the cathode was overheated for a second or two

Card 1/3

ACCESSION NR: AP4035699

and a capacitor was discharged through the tube, thus producing a preliminary ionization of the gas. A 5-millisecond pulse was then applied to the magnet winding, producing the longitudinal magnetic field. After a delay of 1 to 1.5 milliseconds, giving the magnetic field time to reach a nearly constant value, a 3-millisecond rectangular pulse was applied to the discharge tube, producing the plasma filament. The density of the plasma was determined with a Langmuir probe. There is some discussion of the applicability of Bohm's formula to the present conditions, in which the ion Larmor radius is less than the radius of the probe, but it is concluded that relative densities in different parts of the plasma should be given with adequate accuracy. The electron temperature was determined from the intensity ratio of He II 4686 Å to He I 4713 Å lines; it was found to be 5 eV. The highest plasma density observed was $5 \times 10^{14} \text{ cm}^{-3}$, and the ionization is said to have reached 100%. The plasma density decreased rapidly with increasing distance from the axis of the tube; the rate of decrease was greater for stronger magnetic fields. In a 4.4 kOe field the density fell to half its axial value at 8 mm from the axis, and to one-tenth its axial value at 23 mm. The steady-state relation between density and radius was calculated from the theory of ambipolar diffusion, with recombination taken into account. Bessel's equation of zero order is derived for the square of the density (this equation was also obtained by N.Rynn and N.D'Angello (Rev.Sci.Instr.31,1326,1960)), and the

Card

2/3

ACCESSION NR: AP4035699

solutions were fitted to the experimental curves. Good fits were obtained for radii between 1 and 3 cm. This is not astonishing, since there are three disposable parameters (two constants of integration and a parameter β that is theoretically proportional to the magnetic field and to the square root of the recombination coefficient). The values of β that gave the best fit were found to be in fact proportional to the magnetic field for field strengths less than 3 kOe. The value thus obtained for the recombination coefficient is $3.9 \times 10^{-11} \text{ cm}^3/\text{sec}$; this value is of the same order of magnitude as the values obtained by others (E.Hinnow and J.E.Hirtsberg, Phys.Rev.125,795,1962; Yu.M.Aleskovskiy and V.L.Granovskiy, ZhETF 43,1253,1962), and it is concluded that diffusion accounts for the behavior of the filaments in fields up to 3 kOe. In stronger fields, some dispersing mechanism in addition to diffusion must become important. Orig.art.has: 8 formulas, 5 figures and 1 table.

ASSOCIATION: Institut fiziki AN UkrSSR, Kiev (Institute of Physics, AN UkrSSR)

SUBMITTED: 10May63

ATD PRESS: 3082

ENCL: 00

SUB CODE: ME

NR REF SOV: 006

OTHER: 007

Card 3/3

COUNTRY : GDR
CATEGORY :

H-25

ABS. JOUR. : RZKhim., No. 21 1959, No.

76353

AUTHOR : Jurecek, M. and Kozak, P.
: Not given

TITLE : The Characterization of Carboxylic Acids Used in
the Fats- and Soap-Producing Industry by Oxidation
with Chromic Acid

ORIG. PUB. : Z analyt Chem, 167, No 1, 32-38 (1959)

ABSTRACT : The method which permits a distinction between
fatty (FA), naphthenic (NA), and resin (RA) acids
is based on the oxidation of the above acids with
a mixture of CrO_3 and H_2SO_4 according to the
method of Kun and Rotsh [Kunn and Rotsch?] fol-
lowed by alkalimetric titration of the steam-dis-
tilled acid. The results are expressed in mg KOH
required for the titration of the acid formed by
the oxidation of 1 gm of test substance (Kun-
Rotsh number (KRN)). A comparison of the KRN

CARD: 1/3

COUNTRY : GDR
CATEGORY :

H-25

ABS. JOUR. : RZKhim., No. 21 1959, No.

76353

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT

: obtained with the acid number (AN) permits a distinction between the FA and RA on one hand, for which the KRN/AN ratio is about 0.5-0.7 (with the exception of stearic acid, for which it is 0.46), and the NA, on the other, for which the KRN/AN ratio is 1.08-2.56. The FA differ from the NA and RA in that on steam distillation the oxidation products give a nontransparent distillate because of incomplete oxidation. Identification of the liquid acids in the distillate by paper

CARD: 2/3

274

COUNTRY : GDR
CATEGORY :

H-25

ABS. JOUR. : AZKhim., No. 21 1959, No.

76353

AUTHOR :
TITLE :

ORIG. PUB. :

ABSTRACT : chromatography has shown that the oxidation of
palmitic acid gives CH_3COOH and the oxidation of
Na gives CH_3COOH and $\text{CH}_3\text{CH}_2\text{COOH}$; in both cases a
small amount of unidentified acid is formed which
is localized near the solvent starting line.
A. Zelenetskaya

CARD: 3/3

CZECHOSLOVAKIA

UDC 616.988.23:(617.577.50.010.01)

KOZAK, P.; 1st Internal Clinic, Medical Faculty of Hygiene, Charles University (I. Interni Klinika Lekarske Fakulty Hygienicke KU), Prague, Head (Prednosta) Prof Dr V. JONAS.

"Vascular Changes in Paretic Extremities Following Anterior Poliomyelitis."

Prague, Casopis Lokaru Ceskych, Vol 105, No 24-25, 17 Jun 66, pp 668 - 671

Abstract [Author's English summary modified]: 36 patients with blood flow disorders in paretic extremities following poliomyelitis were examined by oscillographic and plethysmographic functional tests. Both peripheral and proximal parts of the blood bed are influenced by the sympathetic tonus. The arterial system is unobstructed and the walls are elastic. The angiopathy of the skin found in some patients is similar to acrocyanosis, but differs from it because it does not affect the distal parts, and has a focal and asymmetrical distribution. 5 Figures, 13 Western, 2 Czech, 1 Rumanian reference. (Manuscript received Sep 65).

1/1

- 24 -

NOVAK, V.; KOZAK, P.; MATOUSEK, P.; JURECEK, M.

CSSR

Institute of Analytical Chemistry, Technical University for Chemistry,
Pardubice (for all)

Prague, Collection of Czechoslovak Chemical Communications, No 2, 1963

"Analytical Aspects of Oxydation of Organic Nitrogen Compounds with
Chromate I. Oxydation of Aromatic Nitro- and Nitrosocompounds"

(4)

KOZAK, P.

Effect of nitroglycerin on peripheral circulation. Cas. lek.
cesk. 103 no.34:934-941 21 Ag '64.

1. I interni klinika lekárske fakulty hygienické Karlovy Uni-
versity v Praze (prednáša prof. dr. V. Jonas, DrSc.).

KOZAK, P., Praha 6, Ckalova 1

Contribution to the assessment of changes in muscle blood flow.
Electromyographic study. Cas. lek. Cesk. 104 no.4:1101-1105
8 0 '65.

1. I. klinika nemoci vnitřních lékařské fakulty hygienické
Karlovy University v Praze (prednosta prof. dr. V. Jonas, DrSc.).
Submitted July 1964.

KOZAK, P.

Pulse registration in the diagnosis of diseases of the arteries of the extremities. 2-channel oscillograph for registering pulse volume changes. Cas. lek. cesk. 104 no.4:103-107 29 Ja '65

1. I. interni klinika lekarske fakulty hygienicke Karlovy University v Praze (prednosta: prof. dr. V. Jonas, DrSc).

KOZAK, Pavel

CZECHOSLOVAKIA

NOVAK, V; KOZAK, P; VACULOVA, L; JIRICEK, M.

Technical Higher School of Chemistry (Technische Hochschule für Chemie), Pardubice (for all)

Prague, Collection of Czechoslovak Chemical Communications,
No 12, 1963, pp 3443-3446

"Analytical Aspects of Oxidation of Organic Nitrogen
Compounds with Chromic Acid. III. Oxidation of
Aromatic Amine and Determination of Amino Nitrogen."

(4)

KOZAK, Pavel; URBAN, Josef ; BOHACKOVA, Zdenka

Electrically heated block with a thermoregulator. Chem listy 57
no.8:840-841 Ag '63.

1. Vysoka skola chemicko-technologicka, Pardubice.

KOZAK, Pavel, MUDr; SKOKAN, Zdenek V., MUDr

Polyostotis fibrous dysplasia. Cesk.roentg. 9 no.2:59-64 June 55.

1. Z II. interniho odd. (prednosta prim. MUDr J.Wagner) a
roentgenologickeho oddeleni (prednosta doc. MUDr Roman Blaha)

SOM v Praze XII

(OSTEITIS FIBROSA

fibrous dysplasia, polyostotic, clin. aspects)

JANDA, Vladimir; KOZAK, Pavel

Thromboangiitis obliterans in the electromyographic picture. Cesk.
neuro1. 25 no.1:17-20 Ja '62.

1. Neurologicka klinika, prednosta doc. dr. z. Macek a I interni klinika,
prednosta prof. dr. V. Jonas, lekarake fakulty hygienicke KU v Praze.

(ELECTROMYOGRAPHY)
(THROMBOANGIITIS OBLITERANS physiol)

JANDA, Vladimir; KOZAK, Pavel

'Contribution to the study of diabetic angiopathies and neuropathies.
Electromyographic study. Cas. lek. cesk. 101 no.39:1170-1173 28 S '62.

1. Neurologicka klinika lekarske fakulty hygienicke KU v Praze,
prednosta prof. dr. Zd. Macek. I. interni klinika lekarske fakulty
hygienicke KU v Praze, prednosta prof. dr. V. Jonas.
(DIABETIC NEUROPATHIES) (ELECTROMYOGRAPHY)
(DIABETIC ANGIOPATHIES)

JONAS, V.; KOZAK, P.

Vascular changes in diabetic patients. Rev. Czech. med. 9
no.3:156-166 '63.

1. First Medical Clinic, Faculty of Hygiene, Charles University,
Prague, Director: Prof. V. Jonas, M.D., D.Sc.

(DIABETIC ANGIOPATHIES)
(ARTERIOSCLEROSIS)
(ELECTROMYOGRAPHY)
(PATHOLOGY)
(STATISTICS)

ZELENKA, J.; KOZAK, P.

Vestibular findings in hypertension and arteriosclerosis.
Cesk. otolaryng. 12 no.2:112-117 Mr '63.

1. Otolaryngologická klinika hygienické fakulty KU v Praze,
prednosta prof. dr. Vl. Hlavacek I interni klinika hygienické
fakulty KU v Praze, prednosta prof. dr. V. Jonas.
(VESTIBULAR FUNCTION TESTS) (HYPERTENSION)
(ARTERIOSCLEROSIS)

CZECHOSLOVAKIA

P. KOZAK, First Internal Medicine Clinic of the Faculty of Medical Hygiene of Charles University; (I. klinika nemoci vnitřních lékařské fakulty hygienické Karlovy University) Head (prednosta) Prof Dr V. JONAS, DrSc; Prague.

"Atherosclerosis of the Arteries of Upper Extremities."

Prague, Casopis Lékarů Českyh, Vol 102, No 20, 17 May 63; pp 545-547.

Abstract [English summary modified]: Sphygmographic studies of carotid, cubital and femoral arteries; plethysmography of finger and toe; determination of pulse wave spread and "crest time" in 41 patients with obliterating atherosclerosis of legs, 10 with obliterating thromboangiitis and 33 controls. Data indicate that arteries of the upper extremity are always involved but to lesser degree, and the aortic wall especially in the subclavian and innominate aa. area is important factor. Three tables; 4 Czech, 5 Soviet and 27 Western references.

1/1

CZECHOSLOVAKIA

V. JONAS and P. KOZAK [Affiliation same as above.]

"Vascular Changes and Diabetes Mellitus. Part 1. Diabetes and Atherosclerosis."

Prague, Casopis Lekarů Ceskych, Vol 102, No 20, 17 May 63; pp 549-554.

Abstract [English summary modified]: Analysis of clinical records of 1227 men and 319 women with cardiac infarct with regard to incidence of diabetes (found in 89 men and 66 women) and effect of latter disease on the cardiac and vascular syndrome. Conclusion is that the 2 diseases are independent from each other to a large degree, both in incidence and amenability to successful treatment. Four tables; 3 Czech references whereof 1 in press and 40 Western.

1/1

CZECHOSLOVAKIA

JONAS, V. Prof, Dr, and KOZAK, P., First Clinic of Internal Medicine (I. klinika nemoci vnitřních), Faculty of Medical Hygiene (Lékařská fakulta hygienická), Charles University, Prague, Prof. Dr V. JONAS, director.

"Vascular Changes and Diabetes Mellitus. II. Angiopathia Diabetica"

Prague, Casopis Lékařů Českých, Vol CII, No 21, 24 May 63, pp 564-569.

Abstract [Authors' English summary]: Results of an angiological examination of 152 diabetic patients (102 men and 50 women), aged 17 to 82 years, and of a control group of non-diabetic persons do not support the view that diabetes promotes the development of atherosclerosis. By means of acral plethysmograms, reactive hyperaemia and electromyographic examination, changes in the terminal parts of the vascular system were found in 27 out of a total of 32 diabetic patients under 40 on the lower extremities and in 9 on the upper extremities. In diabetic patients over 40 years of age chan-
1/2

CZECHOSLOVAKIA

Prague, Casopis Lekarů Ceských, Vol CII, No 21, 24 May 63, pp 564-569.

ges due to aging, atherosclerosis or both were found approximately equally frequently on the large and medium-sized arteries of the extremities in diabetic and nondiabetic patients of the same age group. Changes of the terminal vascular bed must be considered as an integral part of the pathological process and not as a complication or late manifestation of the disease. Sixty references, including 7 Czech.

2/2

KOZAK, P.; JANDA, V.

The value of electromyography for the diagnosis of Winiwarter-Buerger's disease. Rev. czech. med. 10 no.1:1-7 '64

1. First Medical Clinic (director: prof. V.Jonas, M.D., D.Sc.);
Neurological Clinic (director: prof. Z.Macek, M.D.) Medical
Faculty of Hygiene, Charles University, Prague.

*

KOZAK, P.

Indirect heart massage in heart arrest in coronary thrombosis.
Cas. lek. cesk. 103 no.5:113-116 31 Ja'64.

1. L. klinika nemoci vnitřních lékařské fakulty hygienické KU
v Praze (prednosta: prof.dr. V.Jonas).

*

KOZAK, P.; JANDA, V.

Importance of electromyography for the diagnosis of Win-
warter-Burger's obliterating thrombangiitis. Cas.lek.cesk.
103 no.6:156-160 7 Mr:64

1. I. interni klinika lekarske fakulty hygienicke KU v
Praze (prednosta: prof.dr. V.Jonas, DrSc) a Neurologicka
klinika lekarske fakulty hygienicke KU v Praze, (prednosta:
prof.dr. Z.Macek).

*

KOZAK, P.; ZELENA, J.

Disorders in the blood supply of the inner ear as a frequent complication of diabetic angiopathy. Cas.lek.cesk. 103 no.13: 3340337 27 Mr'64

1. I.klinika nemoci vnitřních lékařské fakulty hygienické KU v Praze; (Prednosta: prof.dr. V.Jonas) a Otolaryngologická klinika lékařské fakulty hygienické KU v Praze (prednosta: prof. dr. V.Hlavacek).

*

NOVAK, Vlastimil; KOZAK, Pavel

Conductometric determination of sodium and potassium in the presence of magnesium. Sbor VSChT Pardubice 1/2 41-47 '62 [publ. '63].

1. Katedra analytické chemie, Vysoká škola chemicko-technologická, Pardubice.

VOLAKOVA, Blanka; KOZAK, Pavel; NOVAK, Vlastimil; BEHAREK, Vojtech;
JURECEK, ~~Miroslav~~

Analytic aspects of the oxidation of organic nitrogenous
substances by chromic acid. Pt. 5. Sbor VSChT Pardubice
no.1:75-88 '63.

1. Chair of Analytical Chemistry, Higher School of Chemi-
cal Technology, Pardubice.

NOVAK, V.; KOZAK, P.; VACULOVA, D.; JURECEK, M.

Analytic aspects of the oxidation of organic nitrogen compounds by chromic acid. Pt. 3. Coll Cz Chem 28 no. 12: 3443-3446 D '63.

1. Technische Hochschule fur Chemie, Pardubice.

YANDA, V. [Janda, V.]; KOZAK, P.

Importance of electromyography in differential diagnosis of
obliterating endarteritis of the lower extremities. Zhur.nevr. i
psikh. 63 no.12:1784-1788 '63. (MIRA 18:1)

1. Klinika nervnykh bolezney (direktor - prof. Z.Matsek) i I
klinika vnutrennikh bolezney (direktor - prof. V.Ionash) Meditsin-
skogo gigiyenicheskogo fakul'teta Karlova Universiteta, Praga.

KOZAK, P.

Blood supply disorders of extremities in progressive polyarthritis.
Fysiat. vestn. 43 no.4:209-213 Ag '65.

1. I. interni klinika lekarske fakulty hygienicke Karlovy University
v Praze (prednosta prof. dr. V. Jonas, DrSc.).

KOZAK, P.

Effect of venous drainage on the arterial blood supply. Contribution to the rehabilitation in organic vascular diseases of extremities. Cas. lek. cesk. 104 no.38:1035-1040 24 S '65.

1. I. interni klinika lekarske fakulty hygienicke Karlovy University v Praze (prednosta prof. dr. V. Jonas, DrSc.).

L 30069-66

ACC NR: AP6020596

SOURCE CODE: CZ/0038/65/000/010/0380/0380

AUTHOR: Kozak, Pavel

ORG: Nuclear Power Station, Skoda Plant, Plzen (Skoda, oborovy podnik Plzen, zavod Jaderne elektrarny) 45
B

TITLE: Source of the operating and calculation potentials for analog computer APO 32

SOURCE: JADERNA energie, no. 10, 1965, 380

TOPIC TAGS: analog computer, power supply/APO 32 analog computer

ABSTRACT: The diagram, description and experimental results obtained while using a stabilized potential source with limits of (+100) + 0 + (-100) and a current supply of 200 mA, with an internal resistance of less than 3 Ohms, and a stability better than 0.5% are discussed. Five other sources of power are described. The article is an abstract of report Ae 664/Dok. [JPRS]

SUB CODE: 09, 10 / SUBM DATE: none

Card 1/1

UDC: 681.142-83

KOZAK, P.P.

Solar photoelectric spectrophotometer of the Lvov Astronomical
Observatory. Astron. tsir. no.194:15-16 Ag '58.

(MIRA 12:12)

1.L'vovskaya astronomicheskaya observatoriya.
(Spectrophotometer)

KOZAK, P.P.

New photoelectric spectrometer of the Lvov Astronomical
Observatory. Astron.sbor no.3/4:35-46 '60. (MIRA 14:11)

1. L'vovskiy gosudarstvennyy universitet.
(Spectrophotometer)

KOZAK, P.P.

Electric and light characteristics of the FEU-19M photomultipliers.
Astron.sbor no. 3/4:47-50. 1960. (MIRA 14:11)

1. L'vovskiy gosudarstvennyy universitet.
(Photoelectric multipliers--Testing)

S/035/62/000/000
A055/A101

31520 (also 4123)

AUTHOR:

Kozak, P. P.

TITLE:

New method of spectrum-scanning in a spectroelectrophotometer

PERIODICAL:

Referativnyy zhurnal, Astronomiya i Geodeziya, no. 5, 1962, 17,
abstract 5A149 ("Zirkulyar Astron. observ. L'vovsk. un-ta", 1960,
no. 35 - 36, 61 - 63)

TEXT:

In this article is described a method of spectrum-scanning with a stationary photomultiplier-slit in a spectroelectrophotometer designed on the basis of the autocollimation spectrograph with double diffraction. The image of the Sun, formed by a vertical solar telescope, is constructed on the input slit of the spectrograph. The light-beam, after passing through the input slit and the objective plane mirror, falls upon the diffraction grating. By means of a supplementary plane mirror, the diffracted light-beams are again directed towards the grating. The light-beams, diffracted for the second time, pass through the objective-collimator, and the image of the spectrum is formed on the photomultiplier slit. The additional plane mirror is attached to a lever that can rotate

[A

Card 1/2

Card

KOZAK, P.P.

High-speed photoelectric solar spectrophotometer. Astron.zhur. 38
no.3:549-553 My-Je '61. (MIRA 14:6)

1. L'vovskaya astronomicheskaya observatoriya.
(Spectrophotometer)

S/269/63/000/002/014/037
A001/A101

AUTHOR: Kozak, P. P.

TITLE: The behavior of equivalent widths and residual intensities of spectral lines on the solar disk

PERIODICAL: Referativnyy zhurnal, Astronomiya, no. 2, 1963, 51 - 52, abstract 2.51.417 ("Tsirkulyar Astron. observ. L'vovsk. un-ta", 1962, no. 37 - 38, 19- 25)

TEXT: The author devised a high-speed photoelectric spectrophotometer and tested it on the basis of investigating the behavior of Mg lines on the solar disk. Measurements were carried out in the 2nd order of the diffraction spectrograph at a dispersion of 2 Å/mm. The unrolling of spectrum and drawing of the film in front of the oscillograph screen are performed by the same synchronous motor СД-60 (SD-60). Photocurrents of the multiplier are fed to a d.c. amplifier before supplying to the electronic oscillograph. The speed of recording is 40 Å/sec. The diagrams of seven lines of MgI and MgII obtained for six points on the solar disk are used for the measurement of equivalent widths. The

Card 1/2

The behavior of equivalent widths and...

S/269/63/000/002/014/037
A001/A101

W_{λ} values found for the central part of the disk agree with C. W. Allen's measurements ("Mem. Commonwealth Solar Obs.", 1934, no. 5), and their values at various distances from the disk center confirm the existing data on changes of Fraunhofer lines toward the disk limb.

R. Teplitskaya

[Abstracter's note: Complete translation]

Card 2/2

KOZAK, P.P.

Investigating polarization characteristics of a solar telescope
and diffraction spectrograph. TSir. Astron. obser. L'viv. un.
no.39/40:78-80 '63. (MIRA 16:11)

KOZAK, P.P.; KOPYSTYANSKIY, A.A.

Investigating a double-diffraction spectrograph at the Lvov
Astronomical Observatory. TSir. Astron. obser. L'viv. un.
no.39/40:81-84 '63. (MIRA 16:11)

ACCESSION NR: AP4043020

S/0051/64/017/002/0290/0293

AUTHOR: Kozak, P. P.

TITLE: Rowland ghosts in double-diffraction monochromators and their compensation in photoelectric spectrophotometry

SOURCE: Optika i spektroskopiya, v. 17, no. 2, 1964, 290-293

TOPIC TAGS: diffraction grating, monochromator, spectrophotometry, solar spectrum

ABSTRACT: This research was necessitated by the construction of a photoelectric solar spectrophotometer (P. P. Kozak, Astronom. zh. v. 38, 549, 1961), in which the problem of ghosts was aggravated by the inclusion of an additional mirror. The behavior of the Rowland ghosts was investigated in the monochromator chamber as the lines were displaced continuously over the entire range, using a mercury light with intense lines capable of producing the ghosts. The inten-

1/2

ACCESSION NR: AP4043020

sity of the ghosts exhibited a periodicity with the maxima and minima occurring at fixed positions in the chamber. This periodicity can be used in photoelectric spectrophotometry to eliminate the ghosts by proper placement of the photomultiplier slot. This makes it possible to use ghost-producing gratings in lieu of first-class gratings in some applications. A theoretical analysis of the results will be published separately. Orig. art. has: 3 figures and 5 formulas.

ASSOCIATION: None

SUBMITTED: 20Jul63

ENCL: 00

SUB CODE: OP

NR REF SOV: 004

OTHER: 001

2/2

L 04245-67 EWT(1) GW

ACC NR: AR6004671

SOURCE CODE: UR/0269/65/000/010/0041/0041

AUTHOR: Kozak, P. P.

TITLE: Problem of the blanketing effect in the solar spectrum

SOURCE: Ref. zh. Astronomiya, Abs. 10.51.309

REF SOURCE: Solnechnyye dannyye, no. 11, 1964(1965), 51-55

TOPIC TAGS: solar spectrum, solar photosphere, solar temperature, temperature distribution

ABSTRACT: The magnitude of the blanketing coefficient $\eta = 0.145$ found earlier by the author (RZhAstr, 1963, 9.51.367; 1965, 7.51.406) was used to compute the temperature distribution in the photosphere. The solution of the transfer equation proposed by S. V. Rublev for the gray photosphere with the blanketing effect was used. A surface temperature of 4860K was obtained. The increase of temperature in the upper layers due to the presence of absorption lines reached 280K at a depth of $\tau \approx 0.1$. Bibliography of 11 citations. R. T. [Translation of abstract]

SUB CODE: 03

Card 1/1 fv

UDC: 523.74

PTA KOZAK, R. 9

1348
Kozak R. Prestressed Chord Reinforced Concrete Sleepers -- as Ex-
pression of Technical Progress. 623.213

"Pochodzący strunobetonowe -- wyrażenie postępu technicznego".
Inżynieria i Budownictwo. No. 1, 1961, pp. 7--11, 9 figs., 2 tabs.

The article contains an account of experiments and trials made
at the Institute for Testing Building Materials of the Engineering
College in Poznań with pre-stressed chord reinforced concrete sleep-
ers. The author refers to the economic advantages offered by this
type of sleeper, as well as to the saving in steel which could be effec-
tively adopted by adopting these sleepers on all railway lines in Poland.

KOZAK, R

POL.

671528.3

114

Kozak R. Scope of Applicability and Technology of Modern Timber
Joints.

"Zakres stosowania i technologii wykonywania nowoczesnych połą-
czeń drewnianych". Inżynieria i Budownictwo. No. 12, 1953, pp. 408-412,
27 figs, 2 tabs.

The fact that timber is in short supply makes a policy of planned
economy imperative. Joints with alternate teeth, made in a wide and
varied range of types, are an important achievement. The applicability
of such joints calls, however, for the preparation of typical and most
economical timber constructions.

See also: 3082, 3083, 3084, 3087.

KOZAK, R.

"Increasing Ground Stability By Vibration" p. 181. (Przegląd Budowlany, Vol. 25, No. 5, May, 1953, Warszawa)

East European Vol. 3, No. 2,
SO: Monthly List of ~~Russian~~ Accessions, Library of Congress, February, 1954, ~~1953~~, Uncl.

KOZAK, R., and others

Direct and indirect causes of the building catastrophe at Młoda Gwardia Place
in Poznan.

(PRZEGLAD BUDOWLANY. Vol. 28, no. 2, Feb. 1956, Warszawa, Poland)

SO: Monthly List of East European Accessions (EEAL) LC. Vol. 6, No. 12, Dec. 1957.
Uncl.

KOZAK, ROMAN

POLAND/Chemical Technology - Chemical Products and Their
Application, Part 2. - Ceramics, Glass, Binders,
Concretes. - Binders, Concretes and Other Silicate
Building Materials. H-12d

Abs Jour : Ref Zhur - Khimiya, No 7, 1958, 22237

Author : Roman Kozak

Inst :

Title : Economical Use of Cement in Concrete.

Orig Pub : Inz-ia i budown., 1957, 14, No 8, 294-296

Abstract : Investigations concerning the choice of aggregates of optimum kinds and the study of their properties in concrete were carried out with a view to a more economical use of cement at the preparation of concrete. The concrete strength depends on the amount of contained sand, which determines the necessary amount of cement and how much water the mix requires. A decrease of the content of fine fractions of sand increases the concrete strength. The

Card 1/2

POLAND/Chemical Technology - Chemical Products and Their
Application, Part 2. - Ceramics, Glass, Binders,
Concretes. - Binders, Concrete and Other Silicate
Building Materials.

H-12d

Abs Jour : Ref Zhur - Khimiya, No 7, 1958, 22237

mineralogical structure and the grain shape of the agglome-
rate, as well as its water permeability and strength are
of great importance. In consequence of the great variety
of concrete compositions and of preparation methods, the
former curves of the grain composition of aggregates dis-
continued to answer their purpose. The Bolomey's formula
is valid only for concretes of the brand "400" and lower.

Card 2/2

KOZAK, R.

Economical proportioning of cement in concrete.

P. 297 (Inżynieria i Budownictwo. Vol. 14, no. 9, Aug. 1957, Warszawa, Poland)

Monthly Index of East European Accessions (FEAI) LC.Vol. 7, no. 2,
February 1958

Kozak, Roman

POLAND/Chemical Technology - Chemical Products and Their
Application. Ceramics. Glass. Binding Materials.
Concretes.

H-13

Abs Jour : Ref Zhur - Khimiya, No 17, 1958, 58240

Author : Kozak Roman

Inst :

Title : An Investigation of the Properties of Fuel Slags and the
Means of Their Application in Construction.

Orig Pub : Mater. budowl., 1958, 13, No 1, 4-7.

Abstract : Investigations conducted of different Polish fuel slags
showed that they were fully useful, according to their
chemical and physical properties, for the preparation of
local bindings. Samples of lime-slag bindings, slag
concrete (SC) with a basis of cement, and SC with a
basis of cement and lime, were found during experiments
to have normal construction-technical properties.
R₂₈ Sc, with a cement input of 100-200 kg/m³,

Card 1/2

POLAND/Chemical Technology - Chemical Products and Their
Application. Ceramics. Glass. Binding Materials.
Concretes.

H-13

Abs Jour : Ref Zhur - Khimiya, No 17, 1958, 58240

consists of 16.7-2814 kg/cm². An increase of the cement input does not provide a corresponding rise of the rigidity of SC. SC rigidity with a basis of cement and lime (50 + 50) is somewhat lower, but, with the addition of 25% sand, R₂₈ achieves 23.7-21.1 kg/cm². SC of lower qualities can be used for the preparation of building elements for one-story buildings, while SC with R₂₈ ≥ 25 kg/cm² can be used for the production of large-scale building blocks and panels.

Card 2/2

- 37 -

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